

ABSTRACT

In a radio optical fusion communication system with the integration of an optical fiber transmission path and a radio propagation path, wherein by first and second light sources, an intermediate-frequency signal generating means for generating a modulating signal at an intermediate frequency band, a modulator for modulating an optical signal from the first light source into an SSB modulated optical signal using the intermediate-frequency signal, and an optical mixer for mixing the modulated optical signal with the optical signal from the second light source to obtain an optical transmission signal in a base station, the frequency of either of the optical signals is controlled such that the difference in frequency between the optical signals is a desired frequency of a modulated radio signal, thus switching the frequency channel of the modulated radio signal in the radio propagation path.